ITEM 686.72M INDUCTANCE LOOP INSTALLATION AND SEALING

DESCRIPTION

Under this item the CONTRACTOR shall install inductance loops at the locations indicated on the plans and in accordance with the requirements of these specifications for saw cutting, sealing, lead-in conduit and conduit excavation.

MATERIALS

Loop embedding: Sealer shall be tar sealer. Tar sealer shall be 702-05 asphalt filler for joints and cracks as described in Section 702 of the NYSDOT Standard Specifications of January 2, 1995 and Applicable Addendums. Conduit and hold-down materials shall be as shown in Monroe County DOT Standard Sheet.

CONSTRUCTION DETAILS

Inductance loops shall be installed in accordance with the Monroe County DOT Standard Sheet, Figure 144.

GENERAL

This paragraph describes the work required for satisfactory completion of individual street loop detector installations. Upon completion of the work, each loop shall have been embedded in the roadway and each loop lead-in shall have been routed to the intersection cabinet location, connected to the appropriate terminal strip at the controller, and in all aspects be completely ready for connection to and operation with a detector amplifier unit. Detector installation tests shall be conducted with the detector terminated in the actual controller cabinet; however, temporary protective enclosures shall be acceptable with the approval of the ENGINEER in the case of cabinet delivery delays.

The component elements to be completed as part of each detector installation are described below.

INSTALLATION REQUIREMENTS

The CONTRACTOR shall, with the approval of the ENGINEER, locate each loop and all conduit and pull boxes in accordance with the plans and carry out all excavation, saw cutting, drilling, laying of wire, entry into existing conduits and new conduit placement as required for each detector installation.

The loop wire shall be laid in the sawed slots and run through a conduit stub to the curbside pullbox. The loop wire shall be applied to the shielded lead-in cable in the pullbox and the shielded lead-in cable pulled through conduit as shown on the plans and terminated at the intersection cabinet location. The sawed slots shall be sealed as specified with an approved material as stated above.

The detector installation must satisfy the requirements of the approved acceptance test

described below, and the requirements of the special notes.

TEST REQUIREMENTS

The CONTRACTOR shall prepare vehicle detector acceptance test procedures and data forms for approval by the ENGINEER.

The CONTRACTOR shall conduct the approved vehicle detector acceptance test at each detector installation prior to acceptance of each installation by the COUNTY. The acceptance test shall, as a minimum, include meager checks to ground, and inductance measurement and a demonstration of proper detection of vehicle presence using a representative detector amplifier. All rate measurements shall be made at the termination point at the intersection cabinet location. Data forms approved by the ENGINEER shall be completed and turned over to the ENGINEER as the basis of acceptance.

At least one day's notice shall be given prior to all tests to permit the ENGINEER or his representative to observe each test.

METHOD OF MEASUREMENT

Inductance Loop Installation will be measured for payment as the number of linear meters actually installed in accordance with the Contract Documents or as directed by the ENGINEER. Measurement will be made beginning at the inside wall of the pullbox. In the case of multiple loops at a single location, each loop will be measured separately along its respective full-depth saw cut beginning at the pavement cut-out, and the conduit between the pullbox and the cut-out will be measured once along the center of the conduit. The 25mm conduit which runs from the curb to the pull box is included in this item, unless the distance is greater than three (3) meters, when the conduit will be bid as a separate item.

BASIS OF PAYMENT

The unit price bid per linear meter shall include the cost of pavement sawing, hold-down material, tar sealer, pavement cut-outs, conduit from pavement edge to pullbox, conduit excavation, and the furnishing of all labor, materials, tools, equipment, safety requirements and incidentals as necessary to complete the work. Inductance loop wire, pullboxes, shielded lead-in cable and loop detector modules will be paid for under their respective items.

WARRANTY

The CONTRACTOR shall be responsible for any loop failures for a period of three years from the date of installation.

Payment will be made under:

Item No.	Item	Pay Unit

686.72M	Inductance Loop Installation And Sealing	M